

NAOKO SAKAEDA

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NOAA Earth System Research Laboratory
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RESEARCH INTERESTS

Tropical convective variability, Madden-Julian Oscillation, convectively coupled equatorial waves, tropical-extratropical interaction, weather-climate interaction

EDUCATION

- 2010–2015 Ph.D. Atmospheric Sciences, University at Albany, State University of New York, August 2015
Thesis: The variability of Madden-Julian oscillation convection and the role of Western Hemisphere circulation
Advisor: Paul E. Roundy
- 2006–2009 B.S. Atmospheric Sciences, University of Washington –Seattle, Dec 2009
Specialization tracks: meteorology and climate
Minor in Mathematics

RESEARCH APPOINTMENTS

- 2015–present National Research Council Postdoctoral Research Associate, Physical Sciences Division, Earth System Research Laboratory, NOAA
Advisor: George Kiladis
- 2011–2015 Graduate Research Assistant, Dept. of Atmospheric and Environmental Sciences, University at Albany, State University of New York
Advisor: Paul Roundy
- 2008–2010 Undergraduate Research Assistant, Dept. of Atmospheric Sciences, University of Washington–Seattle
Advisor: Robert Wood

PEER-REVIEWED PUBLICATIONS

Sakaeda N. and Roundy, P. E., 2016: Gross moist stability and the Madden-Julian oscillation in reanalysis data. *Quart. J. R. Met. Soc.*, In press.

Roundy, P. E, **Sakaeda, N**, Gloeckler, L, MacRitchie, K., 2016: Weather climate interactions and MJO influences, *Climate Extremes: Patterns and Mechanism*, Wang, S. et al., Amer. Geophys. Union Monographs Series, John Wiley & Sons Inc., Hoboken, JG, USA. In press.

Sakaeda N. and Roundy, P. E., 2016: The equatorial intraseasonal atmospheric angular momentum associated with the MJO convective initiation. *Quart. J. R. Met. Soc.*, **142**, 1371-1384.

Sakaeda N. and Roundy, P. E., 2016: The development of upper-tropospheric geopotential height anomalies over the Western Hemisphere during MJO convective initiation. *Quart. J. R. Met. Soc.*, **142**, 942-956.

Sakaeda, N. and Roundy, P. E., 2015: The development of upper-tropospheric wind over the Western Hemisphere in association with MJO convective initiation. *J. Atmos. Sci.*, **72**, 3138-3160.

Sakaeda, N. and Roundy, P. E., 2014: The role of interactions between multi-scale circulations on the observed zonally averaged zonal wind variability associated with the Madden-Julian Oscillation. *J. Atmos. Sci.*, **71**, 3816-3836.

Sakaeda, N., R. Wood, and P. J. Rasch, 2011: Direct and semidirect aerosol effects of southern African biomass burning aerosol, *J. Geophys. Res.*, **116**, D12205, doi:10.1029/2010JD015540.

PUBLICATIONS IN REVIEW

Sakaeda N., Kiladis, G., and Dias, J., 2016: The variability of the tropical diurnal cycle associated with the Madden-Julian oscillation. *J. Climate.*, submitted.

Dias, J., **Sakaeda, N.**, Kiladis, G., Kikuchi, K., 2016: Influences of the MJO on space-time tropical convection organization. *J. Geophys. Res.*, submitted.

HONORS AND AWARDS

- 2016 The University at Albany 2015-2016 Distinguished Doctoral Dissertation Award. College of Arts and Sciences, University at Albany, New York, USA.
- 2015 The Narayan R. Gokhale Distinguished Research Scholarship Award, Dept. of Atmospheric and Environmental Sciences, University at Albany, New York, USA
- 2014 NSF Travel Award, World Weather Open Science Conference, Montreal, Quebec, Canada
- 2014 Best Student Poster Presentation Award at AMS 31st Conference on Hurricanes and Tropical Meteorology, San Diego, California, USA

GRANTS AND FELLOWSHIPS

- 2015 National Research Council Associateship Award (Postdoctoral Fellowship)
- 2015 Graduate Student Association Professional Development Grant Award, Spring 2015, University at Albany, New York, USA

COLLOQUIA AND WORKSHOPS

- 2014 AMS 2014 Summer Policy Colloquium, Washington, D. C., USA
- 2012 NCAR Advanced Study Program Summer Colloquium, Boulder, Colorado, USA

INVITED TALKS

- 2016 Colorado State University, Dept. Atmospheric Sciences: The Diurnal Cycle and the Madden-Julian Oscillation. Sept. 2016

TEACHING AND MENTORING EXPERIENCE

- 2016 Research Mentor for Significant Opportunities in Atmospheric Research and Science (SOARS) Program
- 2010–2011 Teaching Assistant, Dept. Atmospheric and Environmental Sciences, University at Albany

ATM 107: The Oceans
ATM 101: The Atmosphere

PROFESSIONAL/DEPARTMENTAL SERVICES AND OUTREACH ACTIVITIES

- 2016 Student Poster Award Team Lead, Program Committee, 32nd Conference on Hurricanes and Tropical Meteorology
- 2016 Forecast Briefing Team, El Nino Rapid Response Field Campaign, ESRL/PSD, NOAA
- 2015 Guest Lecturer, Young Women in Science, Flying Cloud Institute, Crosby Elementary School, Pittsfield, MA
- 2014–2015 Guest Lecturer, Earth Science and Meteorology Class, Voorheesville High School, Voorheesville, NY
- 2013–2015 Volunteer, Family Earth Day, University at Albany, Albany, NY
- 2012–2016 Journal Reviewer for *Journal of Climate*, *Monthly Weather Review*, *Climate Dynamics*, and *Climate*

PROFESSIONAL AFFILIATIONS

Member, American Meteorological Society

CONFERENCE PRESENTATIONS

- 2016 Sakaeda, N., G. Kiladis, J. Dias. The Variability of the Tropical Diurnal Cycle Associated with the Madden-Julian Oscillation. AMS 32nd Conference on Hurricanes and Tropical Meteorology, San Juan, Puerto Rico, USA. Oral Presentation.
- 2016 Sakaeda, N. and P. E. Roundy. Assessment of Gross Moist Stability and its Relationship to the MJO in Reanalysis Data. AMS 32nd Conference on Hurricanes and Tropical Meteorology, San Juan, Puerto Rico, USA. Poster Presentation.
- 2015 Sakaeda, N. and P. E. Roundy. The development of 200-hPa geopotential height in the Western Hemisphere during MJO convective initiation. 7th Northeast Tropical Conference, Dedham, MA, USA. Oral Presentation.

- 2014 Sakaeda, N. and P. E. Roundy. The role of interactions between multi-scale circulations on zonal wind variability associated with MJO. The World Weather Open Science Conference, Montreal, Quebec, Canada. Poster Presentation.
- 2014 Sakaeda, N. and P. E. Roundy. The role of interactions between multi-scale circulations on the observed zonally averaged zonal wind variability associated with the Madden-Julian Oscillation. AMS 31st Conference on Hurricanes and Tropical Meteorology, San Diego, California, USA. Oral Presentation.
- 2014 Sakaeda, N. and P. E. Roundy. The variability of spatiotemporal characteristics of anomalous convective envelopes associated with the Madden-Julian Oscillation. AMS 31st Conference on Hurricanes and Tropical Meteorology, San Diego, California, USA. Poster Presentation.
- 2013 Sakaeda, N. and P. E. Roundy. The role of multi-scale interactions on the observed zonally averaged wind variability associated with the Madden-Julian Oscillation. 6th Northeast Tropical Conference, Rensselaerville, NY, USA. Poster Presentation.
- 2012 Sakaeda, N. and P. E. Roundy. Interannual variability of convectively-coupled equatorial waves. American Geophysical Union Fall Meeting, San Francisco, CA, USA. Poster Presentation.
- 2012 Sakaeda, N. and P. E. Roundy. Interactions between the Madden-Julian Oscillation and equatorial Rossby waves through high-frequency transient eddies. AMS 30th Conference on Hurricanes and Tropical Meteorology, Ponte Vedra Beach, Florida, USA. Oral Presentation.
- 2012 Sakaeda, N. and P. E. Roundy. The seasonal variability in the global atmospheric circulation associated with the Madden-Julian Oscillation. AMS 30th Conference on Hurricanes and Tropical Meteorology, Ponte Vedra Beach, Florida, USA. Poster Presentation.

TECHNICAL SKILLS

MATLAB, NCL, C-Shell, LaTeX